

CITY OF ALBUQUERQUE

Planning Department
David Campbell, Director



Mayor Timothy M. Keller

March 25, 2019

Larry Read, P.E.
Larry Read & Associates
8100 Wyoming Blvd NE, Suite M-4 Box 107
Albuquerque, NM, 87113

RE: 7410 Washington St. NE
Grading and Drainage Plan
Engineer's Stamp Date: 03/17/19
Hydrology File: D17D003AA

Dear Mr. Read:

PO Box 1293

Based upon the information provided in your revised submittal received 03/21/2019, the Grading and Drainage Plan is approved for Building Permit, Grading Permit and SO-19 Permit.

Albuquerque

Please attach a copy of this approved plan in the construction sets for Building Permit processing along with a copy of this letter. Prior to approval in support of Permanent Release of Occupancy by Hydrology, Engineer Certification per the DPM checklist will be required.

NM 87103

If the project total area of disturbance (including the staging area and any work within the adjacent Right-of-Way) is 1 acre or more, then an Erosion and Sediment Control (ESC) Plan and Owner's certified Notice of Intent (NOI) is required to be submitted to the Stormwater Quality Engineer (Curtis Cherne, PE, ccherne@cabq.gov, 924-3420) 14 days prior to any earth disturbance.

www.cabq.gov

If you have any questions, please contact me at 924-3995 or rbrissette@cabq.gov.

Sincerely,

Renée C. Brissette, P.E. CFM
Senior Engineer, Hydrology
Planning Department



City of Albuquerque

Planning Department

Development & Building Services Division

DRAINAGE AND TRANSPORTATION INFORMATION SHEET (REV 6/2018)

Project Title: 7410 WASHINGTON **Building Permit #:** _____ **Hydrology File #:** D17D003AA

DRB#: _____ **EPC#:** _____ **Work Order#:** _____

Legal Description: LOT 2, JOURNAL CENTER PHASE 2, UNIT 1

City Address: 7410 Washington STREET NE

Applicant: LARRY READ & ASSOCIATES (AGENT) **Contact:** LARRY READ

Address: 8100 WYOMING BLVD NE, SUITE M-4 BOX 107, 87113

Phone#: 239-7692 **Fax#:** _____ **E-mail:** LREAD@READENGINEERING.COM

Other Contact: PIPER, LTD **Contact:** JASON HALL

Address: 5610 SAN FRANCISCO BLVD. NE 87109

Phone#: 338-5689 **Fax#:** _____ **E-mail:** _____

TYPE OF DEVELOPMENT: _____ PLAT (# of lots) _____ RESIDENCE ☒ DRB SITE _____ ADMIN SITE

IS THIS A RESUBMITTAL? ☒ Yes _____ No

DEPARTMENT _____ TRANSPORTATION ☒ HYDROLOGY/DRAINAGE

Check all that Apply:

TYPE OF SUBMITTAL:

- ☐ ENGINEER/ARCHITECT CERTIFICATION
- ☐ PAD CERTIFICATION
- ☐ CONCEPTUAL G & D PLAN
- ☒ GRADING PLAN
- ☐ DRAINAGE REPORT
- ☐ DRAINAGE MASTER PLAN
- ☐ FLOODPLAIN DEVELOPMENT PERMIT APPLIC
- ☐ ELEVATION CERTIFICATE
- ☐ CLOMR/LOMR
- ☐ TRAFFIC CIRCULATION LAYOUT (TCL)
- ☐ TRAFFIC IMPACT STUDY (TIS)
- ☐ STREET LIGHT LAYOUT
- ☐ OTHER (SPECIFY) _____
- ☐ PRE-DESIGN MEETING?

TYPE OF APPROVAL/ACCEPTANCE SOUGHT:

- ☒ BUILDING PERMIT APPROVAL
- ☐ CERTIFICATE OF OCCUPANCY
- ☐ PRELIMINARY PLAT APPROVAL
- ☐ SITE PLAN FOR SUB'D APPROVAL
- ☒ SITE PLAN FOR BLDG. PERMIT APPROVAL
- ☐ FINAL PLAT APPROVAL
- ☐ SIA/ RELEASE OF FINANCIAL GUARANTEE
- ☐ FOUNDATION PERMIT APPROVAL
- ☒ GRADING PERMIT APPROVAL
- ☐ SO-19 APPROVAL
- ☐ PAVING PERMIT APPROVAL
- ☐ GRADING/ PAD CERTIFICATION
- ☐ WORK ORDER APPROVAL
- ☐ CLOMR/LOMR
- ☐ FLOODPLAIN DEVELOPMENT PERMIT
- ☐ OTHER (SPECIFY) _____

DATE SUBMITTED: 3/18/2019 **By:** LARRY D. READ, PE

COA STAFF:

ELECTRONIC SUBMITTAL RECEIVED: _____

FEE PAID: _____

March 20, 2019

Western Hemlock, Ltd.
5610 San Francisco Blvd. NE
Albuquerque, NM 87109

Re: 7400 Washington Ave. NE Albuquerque, NM

To Whom It May Concern;

The building ownership of 7400 Washington has been working with the ownership of 7410 Washington during the design process and is aware and approves of the proposed changes to the drainage easement between the two properties.

If there are any questions regarding this matter please contact me.

Jason Hall
Property Manager
505 362-6584



TREASURY DIVISION DAILY DEPOSIT

Transmittals for:
PROJECTS Only

Payment-in-Lieu for Storm Water Quality
Volume Requirement

CASH COUNT	AMOUNT	ACCOUNT NUMBER	FUND NUMBER	BUSINESS UNIT	PROJECT ID	ACTIVITY ID	AMOUNT
TOTAL CHECKS	\$ 3,704.00	461615	305	PCDMD	24_MS4	7547210	\$ 3,704.00
TOTAL AMOUNT						TOTAL DEPOSIT	\$3,704.00

Hydrology#: D17D003AA Name: 7410 Washington St. NE
Payment In-Lieu For Storm Water Quality
Volume Requirement

Address/Legal Description: Lot 2, Journal Center Phase 2, Unit 1

DEPARTMENT NAME: Planning Department/Development Review Services, Hydrology

PREPARED BY Renée C. Brissette, P.E. CFM PHONE 505-924-3995

BUSINESS DATE February 12, 2019

DUAL VERIFICATION OF DEPOSIT Renée Brissette
EMPLOYEE SIGNATURE

AND BY _____
EMPLOYEE SIGNATURE

REMITTER: _____

AMOUNT: _____

BANK: _____

CHECK #: _____ DATE ON CHECK: _____

The Payment-in-Lieu can be paid at the Plaza del Sol Treasury, 600 2nd St. NW. **Bring three copies of this invoice to the Treasury** and provide a copy of the receipt to Hydrology, Suite 201, 600 2nd St. NW, or e-mail with the Hydrology submittal to PLNDRS@cabq.gov.

LOCATION & DESCRIPTION

THE PROPOSED SITE IS AN UNDEVELOPED 0.52 ACRE COMMERCIAL TRACT, LOCATED ON THE EAST SIDE WASHINGTON STREET NE. THE PARCELS TO THE NORTH, EAST, AND SOUTH ARE DEVELOPED OFFICE/WAREHOUSE FACILITIES.

THE CURRENTLY PROPOSED CONSTRUCTION ON THIS SITE IS A 7,010 (Approximately) OFFICE WAREHOUSE FACILITY WITH PAVED PARKING LOT.

FLOODPLAIN STATUS

THIS PROJECT, AS SHOWN ON FEMA'S FLOOD INSURANCE RATE MAP 35001C0136G, EFFECTIVE SEPTEMBER 26, 2008 IS NOT WITHIN ANY DESIGNATED 100-YEAR FLOODPLAIN.

METHODOLOGY

THE HYDROLOGY FOR THIS PROJECT WAS ANALYZED USING THE QUICK CALCULATIONS OF THE JUNE 1997 RELEASE OF THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2.

PRECIPITATION

THE 100-YR 6-HR DURATION STORM WAS USED AS THE DESIGN STORM FOR THIS ANALYSIS. THIS SITE IS WITHIN ZONE 2 AS IDENTIFIED IN THE CITY OF ALBUQUERQUE DEVELOPMENT PROCESS MANUAL, SECTION 22.2. TABLES WITHIN THIS SECTION WERE USED TO ESTABLISH THE 6-HOUR PRECIPITATION, EXCESS PRECIPITATION, AND PEAK DISCHARGE.

EXISTING DRAINAGE

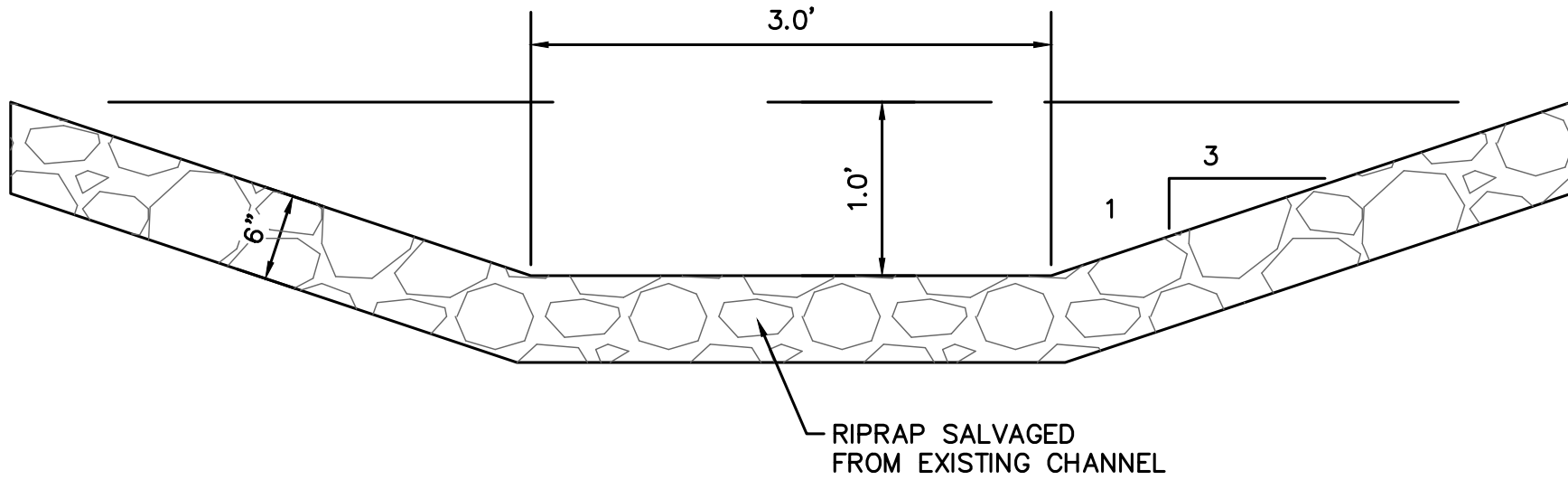
THE EXISTING UNDEVELOPED SITE SLOPES FROM NORTHEAST TO SOUTHWEST WHERE THE RUNOFF DRAINS OVER THE CURB INTO WASHINGTON STREET. ONCE IN THE STREET IT RUNS NORTH WITHIN THE CURB TO AN EXISTING STORM INLET LOCATED ABOUT CENTER OF THIS SITE. THE SITE IS IMPACTED BY RUNOFF CHanneled INTO THE SOUTHEAST CORNER OF THE SITE FROM LOTS TO THE EAST - BASIN OFF-1. A RIPRAP CHANNEL CONVEYS THE RUNOFF TO WASHINGTON STREET. THIS CHANNEL IS MOSTLY WITHIN AN EXISTING DRAINAGE EASEMENT. IN ADDITION, RUNOFF FROM THE PARCELS TO THE EAST DISCHARGE INTO THE VERY NORTHEAST CORNER OF THIS SITE. CURRENTLY THIS RUNOFF SHEET FLOWS ACROSS THE SITE, NORTHEAST TO SOUTHWEST WITH THE RUNOFF GENERATED ONSITE. IT DISCHARGES OVER THE CURB INTO Washington STREET.

DEVELOPED CONDITION

AS STATED ABOVE, THE CURRENT PROPOSED DEVELOPMENT ON THIS SITE IS A COMMERCIAL OFFICE/WAREHOUSE FACILITY WITH ASSOCIATED PAVED PARING. THE PROPOSED GRADING AND DRAINAGE PLAN FOLLOWS THE GENERAL DRAINAGE PATTERNS AND DISCHARGE POINTS. THE RUNOFF FROM OFFSITE BASIN OFF-1 CONTINUES TO FLOW DOWN THE EXISTING CONCRETE FLUME IN THE SOUTHEAST CORNER OF THE SITE THEN WEST TO WASHINGTON STREET. THE EXISTING CHANNEL FROM THE END OF THE FLUME TO WASHINGTON IS POORLY DEFINED SO WE ARE PROPOSING TO REMOVE THE EXISTING RIPRAP, RESHAPE THE CHANNEL WITHIN THE EXISTING 10' DRAINAGE EASEMENT, THEN REPLACE THE RIPRAP. THE RUNOFF DISCHARGES INTO WASHINGTON STREET VIA AN EXISTING SIDEWALK CULVERT. THE RUNOFF FROM THE OFFSITE BASIN OFF-2 IN THE NORTHEAST CORNER OF THE SITE IS A SMALL FLOW RATE SO WE CAPTURED IT IN THE SWALE, AROUND THE NORTH AND WEST SIDE OF THE BUILDING TO DISCHARGE THROUGH A PROPOSED SIDEWALK CULVERT INTO WASHINGTON STREET. RUNOFF FROM ONSITE BASIN 'B' FLOWS WEST IN THE PAVED PARKING AREA AND DISCHARGES INTO WASHINGTON STREET VIA A PROPOSED NEW SIDEWALK CULVERT.

WATER QUALITY PONDING

THE PROPOSED DEVELOPMENT REQUIRES TWO PONDING AREAS PER THE TABLE TO THE RIGHT. THE DEVELOPER DESIRES TO USE THE "CASH-IN-LIEU" OPTION SINCE THE PROPOSED SITE PLAN DOES NOT READILY PROVIDE LOCATIONS FOR THE REQUIRED PONDING.



$$Q = \frac{1.486 * A * R^{2/3} * S^{1/2}}{N}$$

N = 0.045 (ROCK LINING)
A = 6.0 sf
R = 9.32 ft
S = 0.024 ft/ft

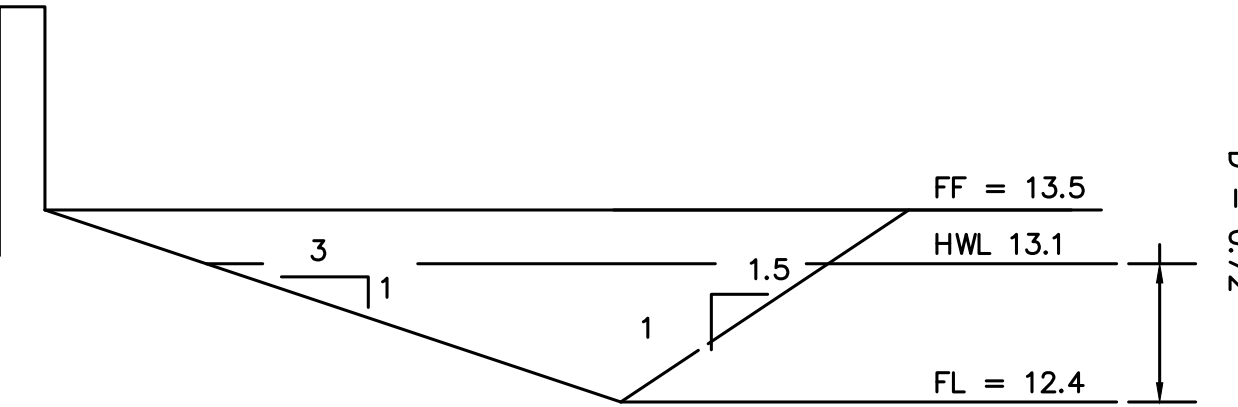
$$Q = \frac{1.486 * 6.0 * 9.32^{2/3} * .024^{1/2}}{0.045}$$

Q = 22.9 cfs >> Q100 = 1.88 cfs OK

100-YEAR HYDROLOGIC CALCULATIONS											
BASIN #	AREA (acre)	LAND TREATMENT				WEIGHTED E (in)	V (6-hr) (acre-ft)	V (6-hr) (cu-ft)	V(10 day) (acre-ft)	V(10 day) (cu-ft)	Q (cfs)
		A (%)	B (%)	C (%)	D (%)	EXISTING CONDITIONS					
BASIN A	0.27	100.00	0.00	0.00	0.00	0.53	0.01	525	0.01	525	0.43
BASIN B	0.25	100.00	0.00	0.00	0.00	0.53	0.01	481	0.01	481	0.39
OFF 1	0.40	100.00	0.00	0.00	0.00	0.53	0.02	770	0.02	770	0.62
OFF 2	0.16	100.00	0.00	0.00	0.00	0.53	0.01	308	0.01	308	0.25
PROPOSED CONDITIONS											
BASIN A	0.27	0.00	0.00	45.00	55.00	1.67	0.04	1,659	0.06	2,531	1.09
BASIN B	0.25	0.00	0.00	14.80	85.20	1.97	0.04	1,791	0.07	3,028	1.12
OFF 1	0.40	0.00	0.00	0.00	100.00	2.12	0.07	3,078	0.12	5,401	1.88
OFF 2	0.16	0.00	0.00	0.00	100.00	2.12	0.03	1,231	0.05	2,161	0.75
EXCESS PRECIP.		0.53	0.78	1.13	2.12	Ei (in)					
PEAK DISCHARGE		1.56	2.28	3.14	4.7	QPi (cfs)					
							ZONE = 2				
%A) + (EB)(%B) + (EC)(%C) + (ED)(%D)							P6-HR (in.) : 2.35				
= (WEIGHTED E)(AREA)/12							P24-HR (in.) : 2.75				
/6-HR + (AD)(P10DAY - P6-HR)/12							P10DAY (in.) : 3.95				
QPB)(AB) + (QPC)(AC) + (QPD)(AD)											

Weir Flow Equation = CPH*3/2				Weir Flow Equation = CPH*3/2			
C	L(ft)	h (ft)	Q(cfs)	C	L(ft)	h (ft)	Q(cfs)
2.6	3.33	0.10	0.27	2.6	3.33	0.10	0.27
2.6	3.33	0.20	0.77	2.6	3.33	0.20	0.77
2.6	3.33	0.30	1.42	2.6	3.33	0.30	1.42
2.6	3.33	0.36	1.87	2.6	3.33	0.36	1.87
2.6	3.33	0.50	3.06	2.6	3.33	0.50	3.06
2.6	3.33	0.60	4.02	2.6	3.33	0.60	4.02
2.6	3.33	0.70	5.07	2.6	3.33	0.70	5.07
2.6	3.33	0.80	6.20	2.6	3.33	0.80	6.20

WATER QUALITY PONDING					
POND ID	BASIN ID	CONTRIBUTING IMPERVIOUS AREA (SQ-FT)	REQUIRED PONDING (IN.)	PONDING VOLUME (0.34/12*AREA) (CU-FT)	PONDING VOLUME PROVIDED (CU-FT)
SITE	A	7080	0.34	201	*
	B	9278	0.34	263	*
TOTAL		16358		463	*
* THE OWNER HAS ELECTED TO PAY THE PAYMENT IN LIEU FOR THE REQUIRED STORMWATER QUALITY VOLUME OF 463 CUBIC FEET. THIS PAYMENT AMOUNT = 463 CF X \$8/CF = \$3,704.00					



$$Q = \frac{1.486 * A * R^{2/3} * S^{1/2}}{N}$$

N = 0.045 (ROCK LINING - PARTIAL)
A = 1.17 sf
R = 3.59 ft
S = 0.010 ft/ft

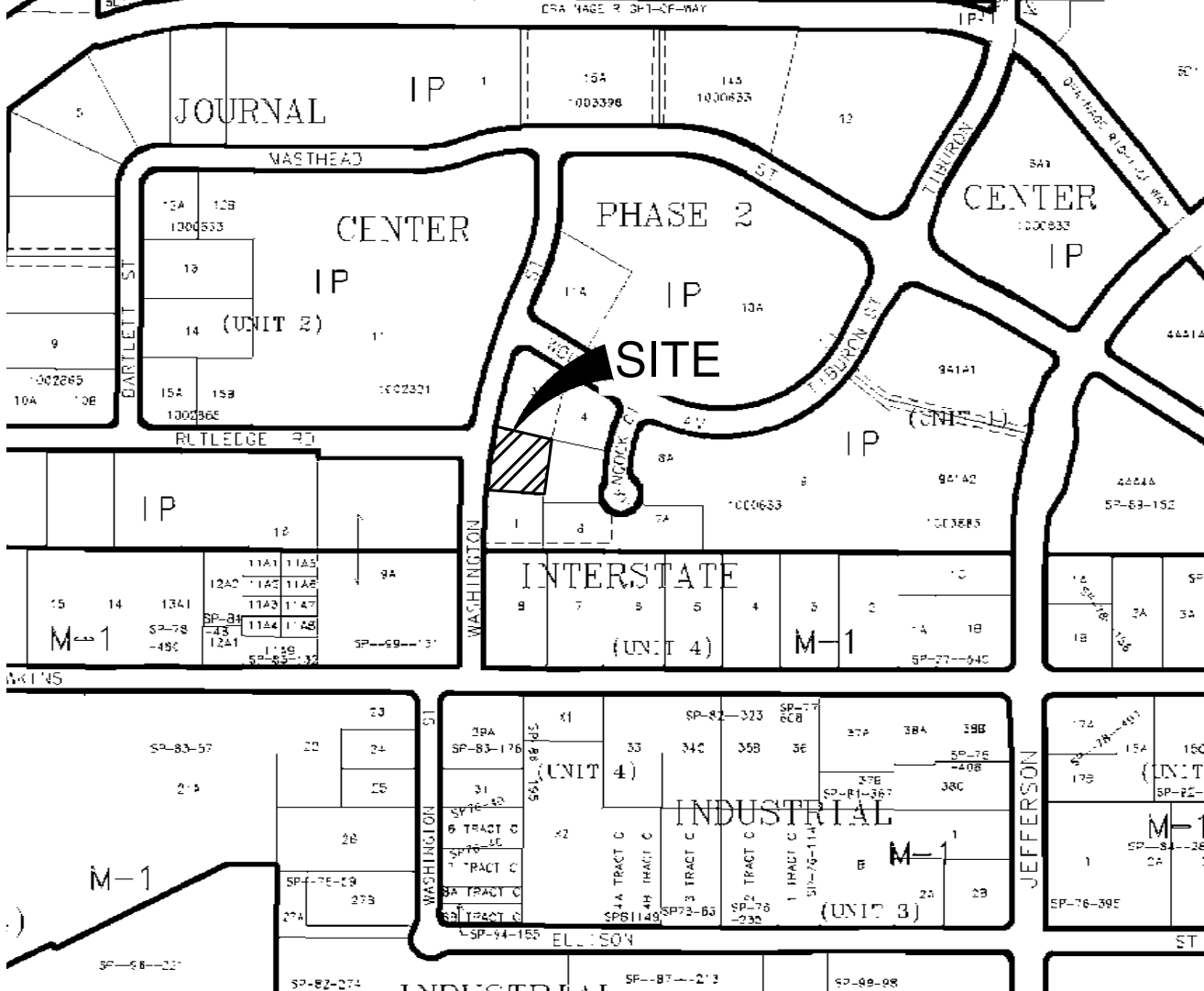
$$Q = \frac{1.486 * 1.17 * 3.29^{2/3} * .01^{1/2}}{0.045}$$

Q = 1.84 cfs = Q100 = 1.84 cfs OK

SECTION B-B SHEET 1/3



FIRM PANEL 35001C0136G
Effective 09/26/2008



VICINITY MAP - ZONE ATLAS D-17-Z



OFFSITE DRAINAGE BASIN MAP
SCALE: 1" = 100'

LARRY READ & ASSOCIATES, Inc.
Civil Engineers
8100 Wyoming Blvd. NE
Albuquerque, New Mexico 87113
Suite M4 Box 107
(505) 239-7692

BY	REVISIONS	DESCRIPTION

NO.	DATE	DESCRIPTION
1		
2		
3		
4		

HYDROLOGY

LAWRENCE D. READ
REGISTERED PROFESSIONAL ENGINEER
NEW MEXICO
10998
5/11/19

7410 WASHINGTON
GRADING PLAN

LOT 2 JOURNAL CENTER PHASE 2 UNIT 1
BERNALLO COUNTY NEW MEXICO

DRAWING NAME:
WALL LOW POND

SHEET
2 OF 3